

NASA Partnerships

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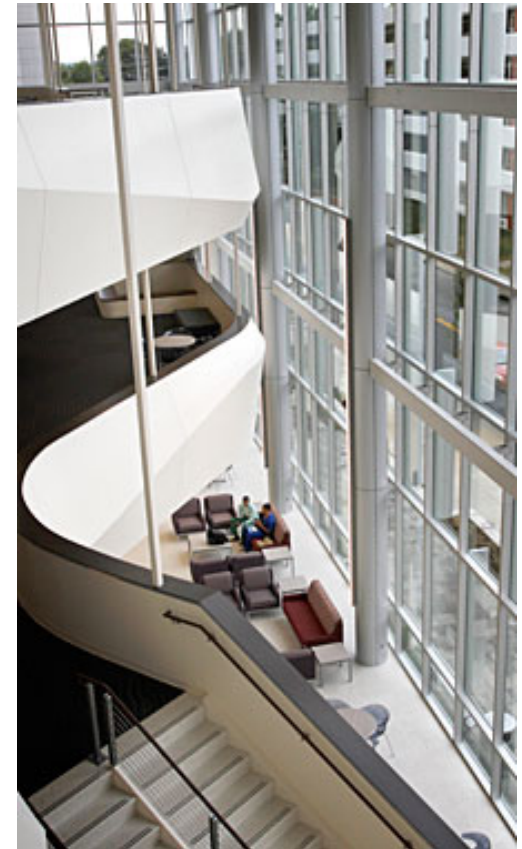
Meharry Medical College Highlights

Ranked second among 141 academic health science centers in the “social mission” of medical education; provides approximately \$37M annually in uncompensated medical and dental care to the uninsured and indigent.

Leading producer of African-American dentists, graduating 16% of all African-American dentists in the United States.

The highest percentage of African Americans graduating with PhDs in the biomedical sciences in the US.

Research spans knowledge from molecules to environmental exposures (exposome); while focusing on health problems that disproportionately affect the underserved, our discoveries are generated to benefit all.



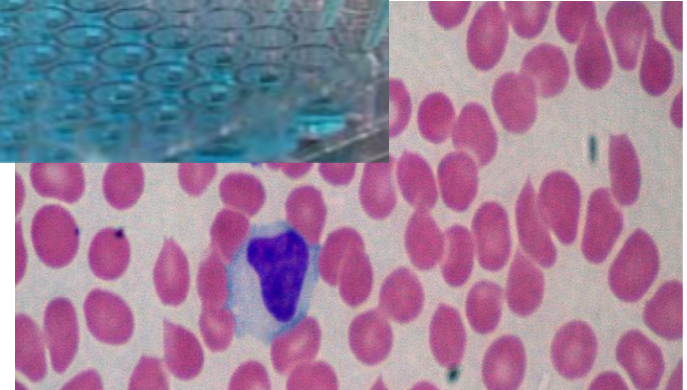
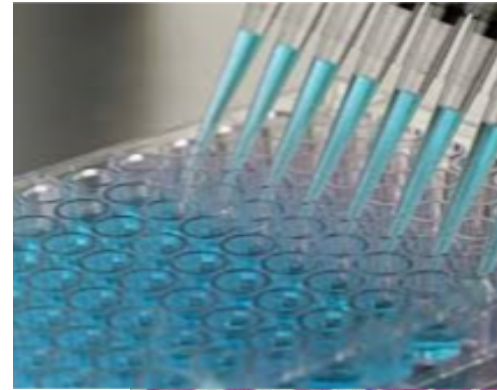
Research Capabilities

Cancer / Infectious Disease

Meharry addresses causes of the high incidence of cancer in minorities and reduces cancer health disparities in Tennessee.

Developed strong infrastructure for cancer patient care and cancer research in areas of basic sciences, population, clinical, and translational research.

Patient focused research innovations are being developed in drug and vaccine development (against HIV and other pathogens), hospital pathogens and emerging/re-emerging infections.



Research Capabilities

Dentistry / Oral Pathogen

Leading the way in fundamental oral science research by exploring the relationships of oral pathogens to systemic disease.

Bio-specimen collection provides researchers insight into the health of the oral cavity on a molecular and cellular level.



Research Capabilities

Animal Care Facility

The Animal Care Facility (ACF) has been accredited by the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC) since 1972.

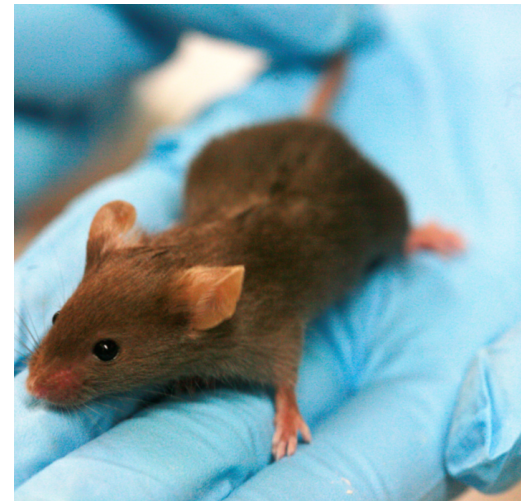


Compliance with the Animal Welfare Act as Amended (7 USC, 2131-2156).

Health Research Extension Act of 1985 (Public Law 99-158)

Public Health Service policy on Human Care and Use of Laboratory Animals (revised 2015).

Guide for the Care and Use of Laboratory Animals revised 2010.



Research Capabilities

Biomedical/Molecular Science

Working with DNA, tissues, micro-organisms, viruses, and complex proteins all to gain the knowledge to serve the community.

Engages the biomedical engineer's emphasis in creating new technology and innovation and producing biomedical scientists.

Conducting training and research that produces MDs and PhDs who become, biomedical scientists, physician scientists, and clinical scientists.



Research Capabilities

Cellular and Molecular Biology

Providing important new insights into the basis and treatment of numerous human diseases.

Our work defines the underlying mechanisms of human disease, identifying new therapeutic targets responsible for disease, and laying the foundation for the development of novel therapies to counter disease.

The "omics" era will continue to be one of rapid growth and discovery that will continuously expand the potential of Cell and Molecular biology to get answers.



Research Capabilities

Bioinformatics

Meharry Microarray and Bioinformatics Core (MBC) and The Meharry Proteomics Core (MPC)

Provide training, instrumentation, services and bioinformatics-driven data analysis

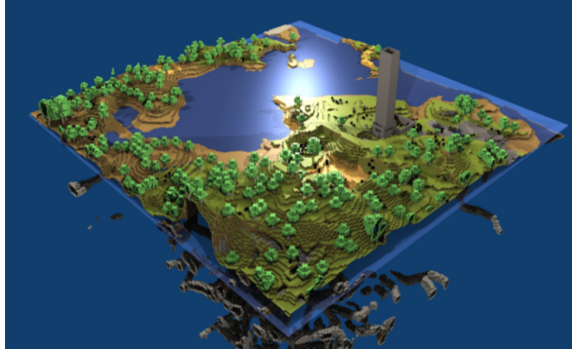
Transcriptomics and Proteomics experimental design, all the way through to advanced data analysis and integration of large scale “Omics” data sets for biomedical research and discovery.

Provide state of the art “Omics” services to support education and research in microarray, genomics and proteomics data analysis, computational biology, and systems biology.



Research Capabilities

Geospatial Information Technology / Data Science



Geospatial Information technology studies the relationships between environmental exposures and population health outcomes over time.

While putative relationships are not indicators of causality, they can provide preliminary data for developing models, testing hypotheses, and designing randomized controlled trials (RCTs).

Data Science Center brings together 25 major data sources into a structured data ecosystem to allow for data mining and prescriptive/predictive analytics to explore and discover associations among the structured and unstructured data.

Past Performance



Secured more than \$100 million in NIH and federal research funding over the past three years

Fuji Oil Company

American Society for Cell Biology

Health Resource Services Administration

National Dental Association Foundation

National Institutes of Health

Department of Health and Human Services

/Office of the Assistant Secretary for Health

Department of Veterans Affairs

Department of the Navy

Department of the Army

Office of the Assistant Secretary for Administration and Management

Department of the Air force

National Aeronautics and Space Administration

Naval School of Health Sciences



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